

REMARKS

Claims 1-4, 6-10, 12-22 and 24-77 are currently pending in the subject application and are presently under consideration. Claims 1, 12, 20, 24, 26, 27, 40, 44, 48, 51, 54, 57, 62, 65, and 68 have been amended as shown on pp. 2-6, 8, and 10-14 of the Reply and claim 61 has been cancelled. The amendments to the independent claims incorporate limitations recited in claims previously presented (dependent claim 12 and 61) and no new subject matter has been added. Specifically, the independent claims are amended to recite *dynamically determining cognitive availability of a user without user intervention* as conveyed to the Examiner over the telephone on April 4, 2008. Accordingly, it is submitted that no new search is required and it is respectfully requested that the amendments be entered.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 24 and 26 Under 35 U.S.C. §101

Claims 24 and 26 stand rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. This rejection should be withdrawn for at least the following reasons. The Federal Circuit has clearly established in *Eolas Techs., Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1338 (Fed. Cir. 2005) and *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358. (Fed.Cir. 1999) that inventions such as that claimed by applicant are statutory.

This court must also decide whether software code made in the United States and exported abroad is a "component of a patented invention" under 271(f)... Section 271(f) refers to "components of a patented invention."... Title 35, section 101, explains that an invention includes "any new and useful process, machine, manufacture or composition of matter."... Without question, *software code alone qualifies as an invention eligible for patenting under these categories*, at least as processes. *Eolas Techs., Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1338 (Fed. Cir. 2005). (Emphasis added).

The Federal Circuit in *Eolas Techs., Inc. v. Microsoft Corp.* clearly established that software code alone is statutory subject matter. Independent claims 24 and 26 relate to a system

implemented on a computer. Independent claim 24, as amended, recites a *computer implemented device*, and independent claim 26, as amended, recites a *computer implemented system*. A device and/or system by itself is statutory subject matter. By the standards set forth in the above decision, a computer implemented system or device in the form of software, hardware, or the combination of both clearly falls within the categories of statutory subject matter.

Additionally, the subject claims clearly produce a useful, concrete and tangible result.

Because the claimed process applies the Boolean principle [abstract idea] *to produce a useful, concrete, tangible result* ... on its face the claimed process comfortably falls within the scope of §101. *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358. (Fed.Cir. 1999) (Emphasis added); *See State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1601 (Fed.Cir.1998). The inquiry into patentability requires an examination of the contested claims to see if the claimed subject matter, as a whole, is a disembodied mathematical concept representing nothing more than a "law of nature" or an "abstract idea," or if the mathematical concept has been *reduced to some practical application rendering it "useful."* *AT&T* at 1357 citing *In re Alappat*, 33 F.3d 1526, 31 1544, 31 U.S.P.Q.2D (BNA) 1545, 1557 (Fed. Cir. 1994) (Emphasis added) (holding that more than an abstract idea was claimed because the claimed invention as a whole was directed toward forming a specific machine that produced the useful, concrete, and tangible result of a smooth waveform display).

Independent claims 24 and 26 recite a computer implemented device and a computer implemented system respectively, which itself are concrete, useful and tangible results. Furthermore, independent claims disclose selection of one of the defined user interfaces whose characterized properties correspond to the dynamically determined current needs, which is a concrete, useful, and tangible result.

In view of the above, it is readily apparent that the claimed invention as recited in independent claims 24 and 26 reduces to a practical application that produces a useful, concrete, tangible result; therefore, pursuant to *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358 (Fed.Cir. 1999), the subject claims are directed to statutory subject matter pursuant to 35 U.S.C. §101. Accordingly, this rejection should be withdrawn.

II. Rejection of Claims 1-4, 6-10, 12-22 and 24-77 Under 35 U.S.C. §102(b)

Claims 1-4, 6-10, 12-22 and 24-77 stand rejected under 35 U.S.C. §102(b) as being clearly anticipated by U.S. Patent No. 5,910,799 (Carpenter *et al.*). Withdrawal of this rejection is requested for at least the following reasons. Carpenter, *et al.* fails to disclose or suggest all limitations set forth in the subject claims.

A single prior art reference anticipates a patent claim only if it *expressly or inherently describes each and every limitation set forth in the patent claim*. *Trintec Industries, Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The *identical invention must be shown in as complete detail as is contained in the ... claim*. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (emphasis added).

Applicants' claimed subject matter relates to a system and method that dynamically determines an appropriate user interface ("UI") to be provided to a user based in part on the cognitive capability of the user, wherein the cognitive capabilities are determined without user intervention. In particular, independent claims 1, 20, 24, 26, 27, 40, 44, 48, 51, 54, 62, 65, and 68, as amended, recite similar aspects, namely, *dynamically determining cognitive availability of a user without user intervention*. Similarly, independent claim 33 recites *without user intervention, determining that the current context has changed in such a manner that the first user interface is not appropriate for the user, the changed context including multiple of a change in a current location of the user, a change in a current mental state of the user, and a change in one or more devices currently available to the user*. Further, independent claim 57 recites *dynamically determining a level of attention which the user can currently give to the user interface without user intervention*. Carpenter, *et al.* does not teach or suggest these novel aspects.

Carpenter, *et al.* merely relates to a system and method that facilitates selecting an appropriate user interface to display as a function of determined user/device location. The system does not select or change a user interface based on the user's cognitive ability and/or a user's mental state, and/or an availability of devices. The Examiner indicates on page 3 of the Final Office Action (dated February 7, 2008) that the cited reference teaches at column 6, lines

22-32, a method to determine the cognitive ability of a user. However, the reference merely teaches a system that prompts a user to change to a determined UI based on the location of the user. Further, on page 4 of the Final Office Action (dated February 7, 2008), the Examiner asserts that Carpenter, *et al.* teaches the determining of cognitive capabilities is performed without user intervention. Applicants' representative respectfully disagrees with this assertion. The cited reference simply teaches changing a user interface based on change in location (e.g., moving from one hospital room to another) – there is no mention or suggestion of determining cognitive capability of the user and furthermore no mention of determining cognitive capability without user intervention.

Applicants' claimed subject matter relates to a system that dynamically modifies a UI during execution so as to appropriately reflect current conditions. Specifically, the system determines cognitive capabilities of a user, without user intervention, and employing such determined user cognitive capability in connection with selecting an appropriate user interface. Dependent claim 10 recites *determining of the current needs includes characterizing user interface ("UI") needs corresponding to a current task being performed, characterizing UI needs corresponding to a current situation of the user, and characterizing UI needs corresponding to current I/O devices that are available*. Contrary to assertions made in the Final Office Action (dated February 7, 2008) at page 4 (regarding claim 10), Carpenter, *et al.* does not teach or suggest at column 8, lines 60-67 (let alone anywhere in the reference) characterizing the UI corresponding to a current task, current situation and/or current I/O device available. The cited reference merely characterizes the UI based on the user's location and is silent with respect to characterizing the UI corresponding to a current task, current situation and/or current I/O device available. Specifically, the cited section relates to providing a location sensitive user interface. As an example, when a doctor enters a patients room the UI will change to an interface that has been set for that location. Each time the doctor enters the room, the same UI will be provided to the doctor. The reference does not teach or suggest a UI that is characterized by the task performed by the doctor, or by the current situation or current I/O device available. Applicants' subject matter, in contrast, teaches a system that can characterize not only based on the location but also characterize the UI based on the task performed by the doctor, or by the current situation or current I/O device available, such that, the doctor can be provided with a different interface each time he/she enters the patient's room. For example, a

different UI can be employed during a routine check up from that employed during an emergency checkup. Carpenter, *et al.* is silent with respect to this novel aspect.

The Final Office Action (dated February 7, 2008) further indicates that the cited reference teaches a change in current mental state of the user as recited in applicants' claim 33. However, the cited sections (column 4, lines 1-15, and column 6, lines 10-30) merely disclose selecting an appropriate user interface based on acquired geographic location; and automatically associating a user interface with a geographic location. There is no mention or suggestion of *determining current mental state of the user*. Furthermore, the reference does not disclose *without user intervention*, determining that the current context has changed in such a manner that the first user interface is not appropriate for the user, the changed context including multiple of a change in a current location of the user, a change in a current mental state of the user, and a change in one or more devices currently available to the user as recited in claim 33.

Additionally, with respect to claim 57, the Final Office Action (dated February 7, 2008) cites to col. 8, lines 60-67, and col. 9, lines 1-20. These cited sections of the reference merely teach modifying user interfaces as a function of change in location. There is no teaching or suggestion of *dynamically determining a level of attention which the user can currently give to the user interface without user intervention; and dynamically determining one or more current characteristics of a user interface that is currently appropriate to be presented to the user based at least in part on the determined level of attention*.

In view of the foregoing, it is readily apparent that Carpenter *et al.* does not anticipate applicants' invention as recited in the subject claims. Accordingly, withdrawal of this rejection is respectfully requested.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP1895US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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